

1	A. If it's -- if it's listed in my	04:40	1	BY MR. KOPEL:	04:42
2	references, then I've seen it before.	04:40	2	Q. This note for publication?	04:42
3	Q. What is it?	04:40	3	A. If there was an editorial board, yes.	04:42
4	A. It's a -- apparently a research note	04:40	4	Q. Now, I would like to ask you some	04:43
5	authored by Fangneng Huang.	04:40	5	questions regarding this note.	04:43
6	Q. Okay. I'll -- I'll --	04:40	6	Do you want to have a quick look at	04:43
7	A. Yeah, the author --	04:40	7	it first, or should I proceed with my questions?	04:43
8	Q. -- represent -- I'm sorry.	04:40	8	A. I would like to look at it.	04:43
9	A. I was just going to say the authors are	04:41	9	Q. Go ahead, and let me know when you're	04:43
10	Huang, Subramanyam, and Clark.	04:41	10	ready, please.	04:43
11	Q. I'll represent to you that this is in	04:41	11	A. Okay. I think I've -- I'm ready.	04:48
12	your list of references for your rebuttal report in	04:41	12	Q. Okay. Do you see that in the study that	04:48
13	this case.	04:41	13	was done here -- and I'm looking on Page 26 in the	04:48
14	Now, I wanted to ask you some	04:41	14	second paragraph -- wood chips were placed in the	04:49
15	questions in connection with this study.	04:41	15	center region closure as a harborage?	04:49
16	Have you read it?	04:41	16	A. Yes, I saw that.	04:49
17	MR. OSTOJIC: Objection to the form.	04:41	17	Q. Was that improper?	04:49
18	Go ahead.	04:41	18	A. I don't know the purpose of their	04:49
19	BY THE WITNESS:	04:41	19	experiment, so you have to -- you have to look at the	04:49
20	A. If it's in my -- in my references, I have	04:41	20	purpose and then make that decision.	04:49
21	read it.	04:41	21	Q. Didn't you just read this study?	04:49
22	BY MR. KOPEL:	04:41	22	A. I did.	04:49
23	Q. What is the Journal of Agricultural Urban	04:41	23	Q. And you still don't know what the purpose	04:49
24	Entomology?	04:41	24	was?	04:49
25	A. I do not know who sponsors that or who	04:41	25	A. Well, I can read.	04:49
Page 230			Page 232		
1	the governing body, the editorial board, the	04:41	1	Q. Well, if you look at Page 1, the second	04:49
2	editorial policies, et cetera. I'm not familiar with	04:41	2	paragraph, it says, "We conducted laboratory and	04:49
3	it.	04:41	3	field trials to determine the repelling abilities of	04:49
4	Q. Do you know it to be a peer-reviewed	04:41	4	three commercial ultrasonic devices against three	04:49
5	journal?	04:41	5	common ant species." And then it identifies them.	04:49
6	A. Not for certain, no.	04:41	6	Do you see that?	04:49
7	Q. Now, there's a footnote here that says,	04:41	7	A. Yes.	04:49
8	"Accepted for publication" on a given date.	04:41	8	Q. Okay. Does that tell you what the	04:49
9	A. Uh-huh.	04:41	9	objective of this test was?	04:49
10	Q. Does that tell you anything in this	04:41	10	A. "Determine the repelling abilities of	04:49
11	regard?	04:41	11	three commercial ultrasonic units against three	04:49
12	A. With respect to being peer-reviewed, no.	04:41	12	common ant species."	04:50
13	Q. Okay.	04:42	13	Q. Was it improper that they used wood chips	04:50
14	A. It's -- typically when something is	04:42	14	as harborage?	04:50
15	labeled as a note, it's -- it's a note, it's not --	04:42	15	A. I'm sure they didn't think so.	04:50
16	it's not considered to be -- it's a quick update on	04:42	16	Q. And the editorial board of this journal,	04:50
17	something that somebody wants to get out there real	04:42	17	or whoever approved this note, didn't think so either	04:50
18	quickly, they're probably continuing the testing and	04:42	18	probably?	04:50
19	would produce a regular refereed journal article	04:42	19	MR. OSTOJIC: Object. Form, foundation.	04:50
20	later in time.	04:42	20	States facts not in evidence. May call for	04:50
21	Q. Okay. But accepted for publication	04:42	21	speculation.	04:50
22	implies that there was some degree of oversight by	04:42	22	But go ahead.	04:50
23	the journal's editorial board before they've accepted	04:42	23	BY THE WITNESS:	04:50
24	this public; correct?	04:42	24	A. Yeah, if it's published, whoever was the	04:50
25	MR. OSTOJIC: Object to form.	04:42	25	gatekeeper to the publishing must have allowed it or	04:50
Page 231			Page 233		

1 I did allow it. 04:50	1 for this journal thought that this was -- this was a 04:52
2 BY MR. KOPEL: 04:50	2 proper practice for purposes of the study; correct? 04:53
3 Q. Now, do you see that here -- and I'm 04:50	3 MR. OSTOJIC: Object to form, foundation. 04:53
4 looking at the third paragraph on Page 26 -- a whole 04:50	4 Speculative. 04:53
5 colony of ants was released into one of the 04:50	5 Go ahead. 04:53
6 enclosures and allowed too acclimate there with the 04:50	6 BY THE WITNESS: 04:53
7 gates closed, and that was the enclosure -- if you 04:50	7 A. Yeah, and under the -- my other comment 04:53
8 read into the next paragraph -- that contained the 04:50	8 that -- a research note, if in fact this is it, is -- 04:53
9 ultrasonic unit, which was then turned on 04:50	9 it's usually not put through the peer review process 04:53
10 continuously for nine days. 04:50	10 like a -- a journal. They're more apt to be accepted 04:53
11 Do you see that? 04:51	11 because they're like progress reports. 04:53
12 A. Yes. 04:51	12 BY MR. KOPEL: 04:53
13 Q. Okay. And in the course of this trial 04:51	13 Q. And here the ants did not move from the 04:53
14 only two ants moved from the enclosure with the 04:51	14 enclosure with ultrasound to the one without 04:53
15 ultrasound to the one without the ultrasound after 04:51	15 ultrasound? You saw that? 04:53
16 three days. 04:51	16 A. A couple of them did; didn't they? 04:53
17 Do you see that? 04:51	17 Q. I believe there were two trials. One of 04:53
18 A. I remember reading that, yes. 04:51	18 them there was two ants and the other one was none. 04:53
19 Q. And then -- and then in Trial 2 the ants 04:51	19 I'm reading the fourth paragraph on Page 26. 04:53
20 failed to move from the enclosure with the ultrasound 04:51	20 A. Yes. Sorry. Yeah, I read that, too. 04:53
21 to the one without after continuous exposure for nine 04:51	21 Q. Okay. Did that indicate that there was 04:53
22 days to ultrasound. 04:51	22 something wrong with the test? 04:53
23 Do you see that? 04:51	23 MR. OSTOJIC: Object to form, foundation. 04:54
24 A. I remember reading it. I'm not following 04:51	24 Incomplete hypothetical. 04:54
25 along with you, but, yes. 04:51	25 But go ahead. 04:54
Page 234	Page 236
1 Q. Okay. So was it inappropriate for 04:51	1 BY THE WITNESS: 04:54
2 Doctors Huang, Subramanyam, and Clark to release the 04:51	2 A. Well, I -- I don't remember -- if 04:54
3 whole colony of ants into one of the enclosures and 04:51	3 something was wrong with the test, what I would have 04:54
4 allow them to acclimate there with the gates closed? 04:51	4 looked at is that acclimation period; and if they did 04:54
5 MR. OSTOJIC: Object to form, foundation. 04:51	5 not move equally in the pretest or the acclimation 04:54
6 Also calls for a incomplete hypothetical. 04:51	6 period -- see, they didn't do that. I think they had 04:54
7 To the extent you can comment 04:51	7 the gates closed, so the design was different than 04:54
8 upon -- based on these facts to the study, go ahead. 04:52	8 the design that we're talking about. 04:54
9 BY THE WITNESS: 04:52	9 With the gates closed -- they 04:54
10 A. I -- I don't know in their mind 04:52	10 acclimated in one chamber just to get them used to 04:54
11 whether -- they must have thought it was appropriate, 04:52	11 that chamber. Then they opened up the -- the gates, 04:54
12 or they wouldn't have done it. 04:52	12 as I remember, and so they weren't given the 04:54
13 BY MR. KOPEL: 04:52	13 opportunity to go back and forth and spread 04:54
14 Q. And do you know Dr. Huang? 04:52	14 themselves out equally in this design. 04:55
15 A. I know of him. I don't know him. 04:52	15 Q. Did they need that opportunity? 04:55
16 Q. Does he have a reputation as a capable 04:52	16 MR. OSTOJIC: Object to form. 04:55
17 entomologist? 04:52	17 BY THE WITNESS: 04:55
18 A. Well, he studied under Suby. I suspect 04:52	18 A. Again, it goes back to what -- their own 04:55
19 he got his PhD. 04:52	19 protocol and what they were trying to do. 04:55
20 And Suby -- it's short for 04:52	20 BY MR. KOPEL: 04:55
21 Subramanyam -- is respected within the field. 04:52	21 Q. Well, there's a lot of similarities 04:55
22 So while I don't know Fangneng 04:52	22 between this protocol and what i2L did; correct? 04:55
23 Huang, if he's -- if he's got a PhD underneath Suby, 04:52	23 MR. OSTOJIC: Object to form, foundation. 04:55
24 I would say that he's credible. 04:52	24 The documents speak for themselves. 04:55
25 Q. And certainly whoever the gatekeeper was 04:52	25 BY THE WITNESS: 04:55
Page 235	Page 237

1 A. A lot of similarities. A lot is a -- 04:55	1 BY MR. KOPEL: 04:57
2 BY MR. KOPEL: 04:55	2 Q. And if you will please take a look at 04:57
3 Q. Well, they both contain harborage; right? 04:55	3 Appendix 4. That is the i2L testing. 04:57
4 A. They both contain harborage. 04:55	4 A. Okay. I've turned to it. Page 1 of 16 04:58
5 Q. Okay.	5 is the title page, and so it's what counsel is 04:58
6 A. Different -- well, hold on. 04:55	6 referring to. 04:58
7 No. The harborages were 04:55	7 Q. Can you please take a look at Pages 8 04:58
8 tremendously different. Wood chips in one, cardboard 04:55	8 going into 9. Please read the last paragraph on 8 04:58
9 tube in another. 04:55	9 until the end of that paragraph on Page 9. 04:58
10 Am I right? 04:55	10 MR. OSTOJIC: To himself? 04:58
11 i2LR had -- Potter put his 04:55	11 MR. KOPEL: To yourself. 04:58
12 cockroaches in there within a cardboard -- some kind 04:55	12 THE WITNESS: Oh, not out loud. 04:59
13 of cardboard enclosed -- or roll. I think they used 04:55	13 MR. KOPEL: Nope. 04:59
14 that terminology, cardboard roll. 04:56	14 THE WITNESS: Okay. 04:59
15 That's a lot different than wood 04:56	15 BY THE WITNESS:
16 chips, so that similarity -- you know, if you take it 04:56	16 A. Okay. I've read it. 05:00
17 up to the level were there harborages in each, yes. 04:56	17 Q. Okay. Does this -- so would you agree 05:00
18 The type of harborage, very different. 04:56	18 that -- the i2L protocol was very similar to the 05:00
19 Q. I think you might be referring to the 04:56	19 Huang and Subramanyam protocol in that the ants were 05:00
20 testing on cockroaches with the cardboard. 04:56	20 all released onto the enclosure on the side with the 05:00
21 A. Oh, you are right. I -- I apologize. 04:56	21 repeller, and they acclimated solely on that side -- 05:00
22 Ants, they had a -- as I 04:56	22 A. Yes. 05:00
23 understood -- a Petri dish painted India black on the 04:56	23 Q. -- during the pretest? 05:00
24 top. 04:56	24 And then in both tests the repeller 05:00
25 So, again, my statement stands. The 04:56	25 was turned on, and in both tests the ants remained on 05:00
Page 238	Page 240
1 harborage for the odorous house ants, very different 04:56	1 the side with the repeller; correct? 05:00
2 than the harborage for these Camponotus species. 04:56	2 MR. OSTOJIC: Object to form, foundation. 05:00
3 Q. But they both -- they both used 04:56	3 Misstates the evidence. 05:00
4 harborage; correct? 04:56	4 But go ahead. 05:00
5 A. They did. 04:56	5 BY THE WITNESS: 05:00
6 Q. And in both instances the entirety of the 04:56	6 A. Yes. 05:00
7 colony was released on the side with the repeller; 04:56	7 Q. Now, Doctors Huang, Subramanyam, and 05:00
8 correct? 04:56	8 Clark did not view the fact that the ants failed to 05:00
9 A. Yes. 04:56	9 move at all as an indication that their study had 05:01
10 Q. And in both instances they were allowed 04:56	10 failed; did they? 05:01
11 to acclimate solely on that side; correct? 04:56	11 MR. OSTOJIC: Object to form, foundation. 05:01
12 A. No. i2LR didn't have any gates, as I 04:57	12 May call for speculation. 05:01
13 remember. I may be wrong, and you can correct me. 04:57	13 But go ahead. 05:01
14 Q. Sure. 04:57	14 BY THE WITNESS: 05:01
15 Do you -- I guess I haven't given 04:57	15 A. Of course not. It's their study. They 05:01
16 you a copy of the report. 04:57	16 would not have tried to publish it if it failed. 05:01
17 MR. KOPEL: We will hand to the witness a 04:57	17 BY MR. KOPEL: 05:01
18 document previously marked as Exhibit 1, the 04:57	18 Q. Do you know Dr. Jeffrey Clark? 05:01
19 deposition of Dr. Michael Potter. 04:57	19 A. No. I do know Suby. 05:01
20 MR. OSTOJIC: Object. Deposition? 04:57	20 Q. Okay. So at least with regards to these 05:01
21 MR. KOPEL: It was marked as Exhibit 1 at the 04:57	21 aspects of the protocols that are similar between 05:01
22 deposition of Dr. Potter. 04:57	22 this note and the i2L report, there were several 05:01
23 MR. OSTOJIC: I thought you meant it's his 04:57	23 respected scientists who viewed those aspects as 05:02
24 Deposition 1. Okay. 04:57	24 being acceptable; correct? 05:02
25 MR. KOPEL: Okay. 04:57	25 MR. OSTOJIC: Object to form, foundation. 05:02
Page 239	Page 241

1	Go ahead.	05:02	1	with the work of Huang and Subramanyam; correct?	05:04
2	BY THE WITNESS:	05:02	2	MR. OSTOJIC: Object to form.	05:05
3	A. Well, we -- we assume that the three	05:02	3	BY THE WITNESS:	05:05
4	scientists who authored the paper approved it, and	05:02	4	A. Well, I see the papers they've published,	05:05
5	then whoever was the gatekeeper for the research note	05:02	5	so to that extent, yes.	05:05
6	approved it. I don't know how many there were or who	05:02	6	BY MR. KOPEL:	05:05
7	they are.	05:02	7	Q. Okay. I'm going to ask you some	05:05
8	BY MR. KOPEL:	05:02	8	questions in connection with this. If you would like	05:05
9	Q. Okay. Do you think that whoever the	05:02	9	to take a look before I ask the questions, you're	05:05
10	gatekeeper for the Journal of Agricultural Urban	05:02	10	welcome to. I know it's a little tedious, but you	05:05
11	Entomology would be -- let me rephrase.	05:02	11	did cite this in your report, so did Dr. Potter, and	05:05
12	Do you think that whoever the	05:02	12	I would like to ask you some questions about it.	05:05
13	gatekeeper for the Journal of Agricultural Urban	05:02	13	A. That's fine.	05:05
14	Entomology is, that they would be a qualified	05:02	14	Q. And if it's helpful, I can ask the	05:05
15	entomologist?	05:02	15	questions first, and that might save time, but	05:05
16	MR. OSTOJIC: Objection. Calls for	05:02	16	whatever you prefer.	05:05
17	speculation.	05:02	17	A. Well, maybe you ask the question; and if	05:05
18	But go ahead.	05:02	18	I -- I reserve the right to go back and read it all.	05:05
19	BY THE WITNESS:	05:02	19	Q. That's fine with me. Okay.	05:05
20	A. Yes.	05:02	20	Okay. Can you -- can you please	05:05
21	BY MR. KOPEL:	05:02	21	take a look at Page 63?	05:06
22	Q. And they clearly approved this study;	05:02	22	A. Okay.	05:06
23	correct?	05:02	23	Q. And I'm referring to the first paragraph	05:06
24	MR. OSTOJIC: Object to form, foundation.	05:02	24	here. And it appears here that there was a 48-hour	05:06
25	Calls for speculation.	05:03	25	acclimation period at the start of the test.	05:06
Page 242			Page 244		
1	But go ahead.	05:03	1	Do you see that?	05:06
2	BY THE WITNESS:	05:03	2	A. Yes.	05:06
3	A. They approved it because it's published.	05:03	3	Q. Okay. And -- but they -- separate and	05:06
4	MR. KOPEL: I'll ask the court reporter to	05:03	4	apart from that they -- they did control tests.	05:06
5	please mark as Exhibit 11 a study titled, "Lack of	05:03	5	Do you see that? There's a -- the	05:06
6	Repellency of Three Commercial Ultrasonic Devices to	05:03	6	next sentence says, "In the control tests"?	05:06
7	the German Cockroach."	05:03	7	A. I see that sentence, yes.	05:06
8	(Whereupon, a certain	05:03	8	Q. Okay. So Huang and Subramanyam did not	05:06
9	document was marked Borth		9	choose to rely on the 48-hour pretest as a control;	05:06
10	Exhibit 11 for		10	correct?	05:06
11	identification.)	05:04	11	MR. OSTOJIC: Object to form, foundation as	05:06
12	BY MR. KOPEL:	05:04	12	to what they thought without him reading the entire	05:06
13	Q. Dr. Borth, do you have Exhibit 11?	05:04	13	article.	05:07
14	A. I do.	05:04	14	THE WITNESS: Yeah, I'm going to have to	05:07
15	Q. Have you seen it before?	05:04	15	read.	05:07
16	A. I'm quite certain that I have.	05:04	16	MR. KOPEL: Okay. Go ahead.	05:07
17	Q. What is it?	05:04	17	THE WITNESS: That's a question I can't	05:07
18	A. It's a paper published in the -- in	05:04	18	answer just by looking at the sentences.	05:07
19	Insect Science in 2006 by Huang and Subramanyam.	05:04	19	THE VIDEOGRAPHER: The time is 5:14.	05:12
20	Q. Okay. And are you familiar with the	05:04	20	This is the end of Media 4.	05:12
21	Journal of Insect Science?	05:04	21	We're off the record.	05:12
22	A. In a cursory fashion.	05:04	22	(WHEREUPON, a recess was	05:12
23	Q. Is that a peer-reviewed journal?	05:04	23	had.)	05:22
24	A. To my knowledge it is.	05:04	24	THE VIDEOGRAPHER: The time is now 5:24 p.m.	05:22
25	Q. And we've discussed that you are familiar	05:04	25	This is the beginning of Media 5.	05:22
Page 243			Page 245		

1 We're back on the record. 05:22	1 the arithmetic to account for it, but that sentence 05:24
2 BY MR. KOPEL: 05:22	2 leads me to believe that. 05:24
3 Q. Dr. Borth, have you reviewed Exhibit 11? 05:22	3 Q. And that aspect of the protocol also was 05:24
4 A. Yes. 05:22	4 necessarily approved through the scrutiny of the peer 05:25
5 Q. Okay. Now, in -- in this study Huang, 05:22	5 review process; correct? 05:25
6 Subramanyam used two cubes with a corridor in between 05:22	6 MR. OSTOJIC: Same objections. 05:25
7 them; correct? 05:23	7 BY THE WITNESS: 05:25
8 A. And Plexiglass. 05:23	8 A. Yes, I would have disapproved it, but I 05:25
9 Q. Plexiglass cubes? 05:23	9 wasn't on the editorial board. 05:25
10 A. Yes. 05:23	10 BY MR. KOPEL: 05:25
11 Q. And there was a 48-hour acclimation 05:23	11 Q. So we've now seen two peer-reviewed 05:25
12 period, but they did not use that pretest period as 05:23	12 publications in which the connecting tube was not 05:25
13 their control; correct? 05:23	13 counted as repelled; correct? 05:25
14 A. Correct. 05:23	14 A. Yes. 05:25
15 Q. In fact, the control was a whole separate 05:23	15 Q. Can you please take a look at Page 65? 05:25
16 test in which there were no ultrasonic units on 05:23	16 A. Okay. 05:26
17 either enclosure; correct? 05:23	17 Q. And I'm looking at the discussion 05:26
18 A. Correct, which I find to be a deficiency, 05:23	18 portion, the last sentence where the authors conclude 05:26
19 but that's correct. 05:23	19 that results from Ballard, et al. in 1984 indicate 05:26
20 Q. Okay. And this deficiency survived 05:23	20 that the device could not repel the German cockroach 05:26
21 scrutiny in the peer review process; correct? 05:23	21 as sufficiently as an effective best management tool. 05:26
22 MR. OSTOJIC: Object to form, foundation. 05:23	22 Do you see that? 05:26
23 MR. KOPEL: I misstated. I -- let me 05:23	23 A. I see it. 05:26
24 rephrase that question. 05:23	24 Q. Okay. And that's the same conclusion 05:26
25	25 that Dr. Potter reached based on that study; correct? 05:26
Page 246	Page 248
1 BY MR. KOPEL: 05:23	1 MR. OSTOJIC: Object. Form, foundation. 05:26
2 Q. This issue which you perceive as a 05:23	2 BY THE WITNESS: 05:26
3 deficiency survived scrutiny during the peer review 05:23	3 A. I don't recall. 05:26
4 process; correct? 05:23	4 BY MR. KOPEL: 05:26
5 MR. OSTOJIC: Same objection. 05:23	5 Q. Okay. And the statement also went 05:26
6 BY THE WITNESS: 05:24	6 through the peer review process; correct? 05:26
7 A. Yes. 05:24	7 A. Yes. 05:26
8 BY MR. KOPEL: 05:24	8 Q. Okay. Do you disagree with it? 05:26
9 Q. Can you please turn to Page 64? 05:24	9 MR. OSTOJIC: Object to form. 05:26
10 A. Okay. 05:24	10 BY THE WITNESS: 05:26
11 Q. Okay. And I'm looking at the right-hand 05:24	11 A. Well, I'd have to refresh my memory by 05:26
12 column, and there's a sentence starting with the 05:24	12 looking at Ballard, et al. 1984. 05:26
13 words, "The remaining." 05:24	13 BY MR. KOPEL: 05:26
14 Do you see that? 05:24	14 Q. I'm going to show you -- 05:27
15 A. Yes. 05:24	15 A. You -- excuse me. But you referenced 05:28
16 Q. It says, "The remaining cockroaches that 05:24	16 Page 65, and only one sentence at the end. 05:28
17 were unaccounted for (not visible) were in the 05:24	17 Also on Page 65 is Table 1. Can I 05:28
18 conduits connecting the enclosures." 05:24	18 make a comment on that? 05:28
19 Do you see that? 05:24	19 Q. Yeah, but please give me one second to -- 05:28
20 A. I do. 05:24	20 okay. Please go ahead. 05:28
21 Q. Okay. So do you understand, based on 05:24	21 A. You asked me several times as an employee 05:28
22 this, that the insects found in the corridors were 05:24	22 of Dow what would I do if I was presented with these 05:28
23 not counted as repelled in this study? 05:24	23 results. 05:28
24 A. Based on that sentence, that's what I 05:24	24 I look at these results and see that 05:28
25 would assume. I -- I did not go through the -- all 05:24	25 numerically in most of the cases, most of the days, 05:28
Page 247	Page 249

1 the daily number of insects in the enclosures were in 05:28	1 Q. Do you know who Ahmad is? 05:32
2 the inactive chamber or cube. 05:28	2 A. I do not. 05:32
3 They were not significantly 05:28	3 Q. Do you know who Zurek is? 05:32
4 different in every case, which the authors reported, 05:28	4 A. I do not. 05:32
5 and so I believe that's where they draw their 05:28	5 Q. But you know who Subramanyam is; right? 05:32
6 conclusions that these were in effective because they 05:29	6 A. I do. 05:32
7 were not significantly different. 05:29	7 Q. Okay. And it looks like this was 05:32
8 If I was in my old Dow role and saw 05:29	8 published in the Netherlands Entomological Society. 05:32
9 those -- that many numerical differences in favor of 05:29	9 Do you see that on the bottom of the 05:32
10 the product, whether it was an insecticide or 05:29	10 page? 05:32
11 whatever, I would want to explore more and find out 05:29	11 A. Yes. 05:32
12 why. 05:29	12 Q. Do you know if this would have been peer 05:32
13 They had four replications, which is 05:29	13 reviewed? 05:32
14 a good number of replications. If you can't get 05:29	14 A. I believe it is. I -- I have seen 05:32
15 significance with four replications, that means the 05:29	15 reference to that journal before. I've never 05:32
16 variability is really high. 05:29	16 published in it. I don't know much about it, but I 05:32
17 And that leads me to question what 05:29	17 suspect that it is peer reviewed. 05:32
18 else is going on here. 05:29	18 Q. Now, I -- I really just have one point I 05:32
19 And as a Dow employee I would have 05:29	19 wanted to ask you about here, and you can read as 05:32
20 conducted a follow-up test to do more to 05:29	20 much as you'd like, but I'm not sure that you'll find 05:32
21 understand -- try to understand what's going on. 05:29	21 it necessary to read the whole thing. 05:32
22 Q. Okay. Thanks. 05:29	22 My question for you is located on 05:32
23 So do you disagree with the author's 05:29	23 Page 31, and I am referencing the first full sentence 05:33
24 conclusion that the test did not provide evidence 05:29	24 on Page 31, which reads: "The unaccounted 05:33
25 that these devices can repel or eliminate the German 05:29	25 cockroaches were found in the conduits connecting the 05:33
Page 250	Page 252
1 cockroach as the manufacturers claim? 05:29	1 chambers." 05:33
2 MR. OSTOJIC: Object. Incomplete 05:30	2 Do you see that? 05:33
3 hypothetical. Form. 05:30	3 A. "The unaccounted cockroaches were 05:33
4 But go ahead. 05:30	4 found" -- yes, I see that. 05:33
5 BY THE WITNESS: 05:30	5 Q. So do you understand, based on this, that 05:33
6 A. I cannot disagree with their conclusions. 05:30	6 in this test the cockroaches found in the conduits 05:33
7 I only added what I added because the tabular results 05:30	7 connecting the chambers were not counted as repelled? 05:33
8 are way in favor numerically of -- it just draws 05:30	8 A. That's what they said, yes. 05:33
9 questions. It just means there's something else 05:30	9 Q. Okay. And that point passed scrutiny of 05:33
10 going on that was not teased out. 05:30	10 peer review; right? 05:33
11 MR. KOPEL: I'll ask the court reporter to 05:31	11 MR. OSTOJIC: Object to form, foundation. 05:33
12 please mark as Exhibit 12 a document titled, 05:31	12 BY THE WITNESS: 05:33
13 "Responses of Mosquitoes and German Cockroaches to 05:31	13 A. Because the peer review panel did not 05:33
14 Ultrasound Emitted from a Random Ultrasonic 05:31	14 include me. 05:33
15 Generating Device." 05:31	15 BY MR. KOPEL: 05:33
16 (Whereupon, a certain 05:31	16 Q. Now, we've looked at several articles 05:33
17 document was marked Borth 05:31	17 where they counted the conduit. They did not count 05:33
18 Exhibit 12 for 05:31	18 the con -- let me rephrase. 05:33
19 identification.) 05:31	19 We've now looked at several peer- 05:33
20 BY MR. KOPEL: 05:31	20 reviewed articles in which insects found in the 05:34
21 Q. Dr. Borth, do you have Exhibit 12? 05:31	21 conduit were not labeled as repelled; correct? 05:34
22 A. I do. 05:31	22 A. Yes. 05:34
23 Q. Okay. What is it? 05:31	23 Q. Okay. Sitting here today can you name a 05:34
24 A. It's an article by Ahmad, Subramanyam, 05:31	24 single publication in which the insects found in the 05:34
25 and Zurek. 05:32	25 conduit were counted as repelled? 05:34
Page 251	Page 253

1 A. Do you consider my report to be a 05:34	1 BY THE WITNESS: 05:36
2 publication? 05:34	2 A. If the universe of population and -- and 05:36
3 Q. Other than your report, please. 05:34	3 the generally accepted -- if entomologists look at 05:36
4 A. I can't answer -- I can't ask you 05:34	4 these three citations or papers that we looked at and 05:37
5 questions. Sorry. 05:34	5 developed generally accepted from them, then, yes. 05:37
6 I can't today, you know, without 05:34	6 BY MR. KOPEL: 05:37
7 doing a full literature search, describe or enumerate 05:34	7 Q. I'd like to ask you, please, some 05:37
8 any publication that counted. 05:34	8 questions about your rebuttal report in this case, 05:37
9 Q. Having reviewed these publications, would 05:34	9 which I think we marked as Exhibit 2. 05:37
10 you agree that it's generally accepted in the field 05:34	10 Okay. Please turn to Page 5. 05:37
11 as an acceptable practice to not label insects found 05:34	11 So it looks like the first criticism 05:37
12 in the conduit as repelled? 05:35	12 you had towards the i2L study is that there was no 05:37
13 MR. OSTOJIC: Object to form, foundation as 05:35	13 control for the physical presence of the repeller; 05:37
14 to these publications, and also may call for 05:35	14 correct? 05:37
15 speculation. 05:35	15 A. Yes. 05:37
16 But go ahead. 05:35	16 Q. Okay. Now, can you explain how the 05:37
17 BY THE WITNESS: 05:35	17 physical presence of the repeller could have been a 05:38
18 A. In these publications that we reviewed 05:35	18 confounding variable? 05:38
19 today, it appears that way. 05:35	19 A. It could have an odor to it. There could 05:38
20 BY MR. KOPEL: 05:35	20 be a lot of things. The fact that it's not there, 05:38
21 Q. Would you say that based on reviewing 05:35	21 that it's not present or controlled for is the 05:38
22 several peer-reviewed publications that did this 05:35	22 deficiency because you don't know what it could be 05:38
23 practice, that it is a generally acceptable practice 05:35	23 unless you did the test that way. 05:38
24 in the field to do it that way? 05:35	24 Q. So would you agree that the possibilities 05:38
25 A. Well -- 05:35	25 really in terms of this being a deficiency is that it 05:38
Page 254	Page 256
1 MR. OSTOJIC: Object to form. 05:35	1 could either, A, cause pests to move away from the 05:38
2 But go ahead. 05:35	2 physical presence of the repeller; or, B, cause pests 05:38
3 BY THE WITNESS: 05:35	3 to move towards the physical presence of the 05:38
4 A. It's certainly something that you could 05:35	4 repeller? 05:38
5 emulate. If you were designing your own protocol and 05:35	5 A. No, I'm not saying anything about how 05:38
6 you went to the literature and saw these three 05:35	6 they move. 05:38
7 publications, it would seem reasonable to me that you 05:35	7 I'm just saying that the conditions 05:38
8 could -- you could, you wouldn't have to, but you 05:35	8 are not identical. The conditions as set up there 05:38
9 could design the types the same way and have the 05:36	9 are not identical. 05:38
10 categories of repelled, not repelled -- or active, 05:36	10 Q. But can you explain why it's important to 05:38
11 not active -- active, you know, the chambers, and not 05:36	11 control for this? 05:39
12 count the -- whatever number of insects were in the 05:36	12 A. Oh, it's a variable. There's a -- 05:39
13 connecting tube, which I continue to say is they 05:36	13 there's something present in one cube that's not 05:39
14 flaw. 05:36	14 present in every other cube. 05:39
15 BY MR. KOPEL: 05:36	15 Q. Okay. So when you say this is a 05:39
16 Q. I appreciate your response. 05:36	16 variable, is the concern that the physical presence 05:39
17 I asked a very specific question, 05:36	17 of the repellers could affect the movement of the 05:39
18 and that was: Based on these peer-reviewed 05:36	18 insects in the test? 05:39
19 publications that we've reviewed now, would you say 05:36	19 A. That's -- that's my -- that's a concern. 05:39
20 that it is accepted within the field to have a 05:36	20 Q. Okay. And the concern would be either 05:39
21 protocol in which the insects found in the conduit 05:36	21 that the physical presence itself would repel the 05:39
22 are not counted as repelled? 05:36	22 insects or the physical presence itself would attract 05:39
23 MR. OSTOJIC: Object to form, foundation. 05:36	23 the insects; right? 05:39
24 Also asked and answered. 05:36	24 A. It could have any kind of effect on the 05:39
25 But go ahead. 05:36	25 insects. 05:39
Page 255	Page 257

1 Q. But the concern with how this might 05:39	1 BY THE WITNESS: 05:41
2 affect the end data from our control study here is 05:39	2 A. Are you -- are you asking me if we have a 05:42
3 one of those two things; correct? 05:39	3 space with -- a homeowner has a space with a repeller 05:42
4 A. It could affect the behavior of the 05:39	4 and without a repeller and what the effect would be? 05:42
5 insects, and by saying observe behavior, that in this 05:39	5 BY MR. KOPEL: 05:42
6 issue is the locomotion direction of their movement. 05:39	6 Q. No. 05:42
7 Q. Okay. Would you agree that there's a 05:40	7 A. Okay. Try again then. 05:42
8 difference between testing the efficacy of a device 05:40	8 Q. Okay. Would you agree that it's unlikely 05:42
9 and testing the efficacy of its output? 05:40	9 that the homeowner would have the physical repeller 05:42
10 A. Testing the presence of a device and	10 that's not active in its house? 05:42
11 the -- 05:40	11 MR. OSTOJIC: Object to form, foundation. 05:42
12 MR. OSTOJIC: Do you want it read back? 05:40	12 May call for speculation. 05:42
13 THE WITNESS: Yes, read back, please. 05:40	13 But go ahead. 05:42
14 MR. KOPEL: Let me rephrase. 05:40	14 BY THE WITNESS: 05:42
15 BY MR. KOPEL: 05:40	15 A. I believe that would be reasonable. 05:42
16 Q. Would you agree there's a difference 05:40	16 If they're going to buy it, they're 05:42
17 between testing the effectiveness of a device and 05:40	17 going to plug it in. 05:42
18 testing the effectiveness of its output? 05:40	18 BY MR. KOPEL: 05:42
19 A. There's a -- there could be a difference. 05:40	19 Q. So the alternatives are either the 05:42
20 You'd want to test it to find out. 05:40	20 homeowner likely has an activated device or has no 05:42
21 Q. Okay. So in this instance were we trying 05:40	21 device at all; correct? 05:42
22 to determine in this case the effectiveness of the 05:40	22 MR. OSTOJIC: Object. Same object -- form, 05:42
23 device or the effectiveness of the output? 05:40	23 foundation. 05:42
24 A. It's all in one. You can't separate them 05:40	24 BY MR. KOPEL: 05:42
25 because the device is emitting the sound. 05:41	25 Q. Against that backdrop don't you think it 05:42
Page 258	Page 260
1 Q. Well, let's say, in fact -- 05:41	1 I was perfectly reasonable to use no device for the 05:42
2 A. And that's why I talk -- that's precisely 05:41	2 control when we're seeking to determine the 05:43
3 why I made the point that I did in deficiency. 05:41	3 effectiveness of the device rather than the 05:43
4 Q. Let's say that the pests were 05:41	4 effectiveness of its ultrasonic sound waves? 05:43
5 hypothetically repelled by the mere presence of the 05:41	5 A. Was your question perfectly reasonable? 05:43
6 repeller -- 05:41	6 Is that how you started it? 05:43
7 A. Okay. 05:41	7 Q. Against that backdrop don't you think it 05:43
8 Q. -- okay? Would that be relevant to the 05:41	8 was perfectly normal to use no device for the control 05:43
9 Bell + Howell ultrasonic pest repeller's ability to 05:41	9 when we are seeking to determine the effectiveness of 05:43
10 drive pests out? 05:41	10 the device rather than effectiveness of its 05:43
11 A. It could be. It could be an additive 05:41	11 ultrasonic sound waves? 05:43
12 effect. 05:41	12 MR. OSTOJIC: Object to the form. 05:43
13 Q. And let's say the press -- mere presence 05:41	13 But go ahead. 05:43
14 of the device hypothetically had the opposite effect 05:41	14 BY THE WITNESS: 05:43
15 where it attracted insects, would that be relevant to 05:41	15 A. It depends on the person who -- for me 05:43
16 the efficacy of the device? 05:41	16 the answer would be no. 05:43
17 A. Yes. 05:41	17 For Dr. Potter apparently the answer 05:43
18 Q. Okay. Would you agree that the 05:41	18 is yes. 05:43
19 alternative to having -- for homeowners to having the 05:41	19 It would not be perfectly normal. 05:43
20 device present in their house is to not have the 05:41	20 BY MR. KOPEL: 05:43
21 device present in their house? 05:41	21 Q. What about reasonable? Let me -- I 05:43
22 MR. OSTOJIC: Object to form, foundation. 05:41	22 probably should have said reasonable. 05:43
23 I'm not sure the question is understandable. 05:41	23 A. I would want to test every variable. I 05:43
24 But go ahead. 05:41	24 mean that's what scientific method is. 05:43
25	25 You systematically tease out factors 05:43
Page 259	Page 261

1 that contribute to variability. 05:44	1 houses; right? 05:47
2 And without that control, the 05:44	2 A. Yes. 05:47
3 negative control, you don't know what that -- what 05:44	3 Q. Okay. How about glass? 05:47
4 the mere presence of the ultrasonic repeller is. 05:44	4 A. Yes. 05:47
5 Now, how important is that in the 05:44	5 Q. Okay. And these are things that insects 05:47
6 grand scheme of things, I can't say. 05:44	6 can harbor in; correct? 05:47
7 But it is a -- it -- it's a concern 05:44	7 A. I don't know about glass. 05:47
8 to me. It's a deficiency in my mind. 05:44	8 Q. Well, how about a cardboard box? 05:47
9 Q. Let's say that the device's ultrasonic 05:44	9 A. They could, but I don't -- 05:47
10 sound waves were ineffective to repel, but the presence 05:44	10 Q. Okay. So don't you think it would be 05:47
11 of the device itself was effective to repel, would 05:44	11 reflective of real-world conditions to have 05:48
12 the device then be effective? 05:44	12 harborages in the test just like they might have in 05:48
13 A. You just said it would, yeah. 05:44	13 people's residences? 05:48
14 As a hypothetical you said if it was 05:44	14 A. Not when you're trying to discern or 05:48
15 effective, would it be effective. 05:44	15 tease out the effect the ultrasonic repeller. 05:48
16 Yes. 05:44	16 This is a very simple question. The 05:48
17 Q. Okay. So because of that don't you think 05:44	17 ultrasonic repeller either repels insects or it does 05:48
18 it's important to test for whether -- when you have a 05:44	18 not repel insects. 05:48
19 repeller versus when you don't have a repeller? 05:44	19 Nowhere are we asking whether we're 05:48
20 A. Yes, that's certainly important. 05:44	20 in -- where there's cardboard involved or sofas 05:48
21 Or repeller on, repeller off. 05:44	21 involved or anything. 05:48
22 Q. Can you please turn to Page 7. 05:45	22 You're just asking the question, 05:48
23 A. Okay. 05:45	23 very simply: Does the repeller do what the product 05:48
24 Q. Okay. Do -- do you contend that the use 05:45	24 is claimed to do? 05:48
25 of a harborage in the i2L experiments invalidates 05:45	25 Q. Okay. But don't you agree that it would 05:48
Page 262	Page 264
1 their results? 05:46	1 be more reflective of real-world conditions to have a 05:48
2 A. In the way that they used them, yes. 05:46	2 harborage in the test? 05:48
3 Q. Why? 05:46	3 A. No, it's not the purpose of that test. 05:48
4 A. Well, again, there was no negative 05:46	4 Q. Well, now -- 05:48
5 control for the presence of the harborages. 05:46	5 A. That's the purpose of -- 05:48
6 And even more important, I think, is 05:46	6 Q. Who ran the test, you or somebody else? 05:48
7 the fact that ultrasonic sound from the 05:46	7 A. No, you're right. It's Potter's 05:48
8 Black & Decker -- sorry -- from the Bell + Howell 05:46	8 hypothesis. He is trying to -- I think -- trying to 05:48
9 repellents does not penetrate cardboard, does not 05:46	9 demonstrate that in a fully-occupied house, okay, 05:49
10 penetrate glass for ants, so the fact that these 05:46	10 that has furniture, maybe that's -- his simulation 05:49
11 harborages were in place and the insects were 05:46	11 there is the harborage, that these devices can repel 05:49
12 introduced into the chamber in these harborages does 05:46	12 insects in the harborage. 05:49
13 not make any sense to me. 05:46	13 But the product literature does not 05:49
14 Q. What do you mean by a negative control 05:46	14 claim. It claims that it repels. It doesn't claim 05:49
15 for the harborages? 05:46	15 that it repels things out of furniture or out of 05:49
16 A. Negative control is -- in this case it 05:46	16 cardboard. 05:49
17 would be -- it would be easily tested, as I say here, 05:47	17 Q. Can the product repel things out of 05:49
18 by using arenas with and without harborages. 05:47	18 furniture or cardboard? 05:49
19 So he did not have -- Potter did not 05:47	19 A. If the insects cannot -- are not exposed 05:49
20 have a chamber that did not have a harborage. 05:47	20 to the ultrasonic waves, then they would not be 05:49
21 Q. Wouldn't you agree that people's houses 05:47	21 repelled from the ultrasonic waves. 05:49
22 contain furniture? 05:47	22 Q. So if you have insects inside furniture 05:49
23 A. I would. 05:47	23 or cardboard in a house where the ultrasonic pest 05:49
24 Q. Yeah. And it wouldn't be unacceptable to 05:47	24 repeller is plugged in, the ultrasonic pest repeller 05:49
25 expect that people might have cardboard in their 05:47	25 would not be effective to repel or drive out those 05:50
Page 263	Page 265

1 insects; correct? 05:50	1 they need food, they need water, and they are born to 05:51
2 MR. OSTOJIC: Object to form. 05:50	2 breed. 05:51
3 BY THE WITNESS: 05:50	3 Q. What do you mean by safety? 05:51
4 A. If the insects are not exposed to the 05:50	4 A. Oh, they feel protected. 05:52
5 ultrasonic sound, then there would be no effect on 05:50	5 Q. So they prefer -- they prefer to nest in 05:52
6 them. You would not expect that, and it's clearly 05:50	6 a place with harborage; correct? 05:52
7 stated in the product literature. 05:50	7 A. Well, cockroaches and ants do, which are 05:52
8 Q. Okay. So it sounds to me, and correct me 05:50	8 the case here. 05:52
9 if I'm wrong, like -- the issue that you're taking 05:50	9 Q. And those are areas where the -- the 05:52
10 with this test is that it had the wrong objective, 05:50	10 Bell + Howell repellents cannot reach; correct? 05:52
11 not that it was invalid, it had the wrong objective; 05:50	11 A. Ultrasound cannot reach them. Clearly 05:52
12 is that correct? 05:50	12 stated on the product literature. 05:52
13 A. One is -- 05:50	13 Q. Okay. Let's talk about the pheromones, 05:52
14 MR. OSTOJIC: Object -- I'm sorry. 05:50	14 please. 05:52
15 Mischaracterizes his prior 05:50	15 And I -- I suspect that the issue 05:52
16 testimony. 05:50	16 here is similar to the last one. 05:52
17 But go ahead. You've answered. 05:50	17 Would you agree that in a -- in a 05:52
18 BY MR. KOPEL: 05:50	18 residence that has an insect infestation that the 05:52
19 Q. Is that correct? 05:50	19 insects would have left pheromones in that house? 05:52
20 A. That's one of my criticisms, if you will, 05:50	20 MR. OSTOJIC: Object to form, but go ahead. 05:52
21 of the -- 05:50	21 BY THE WITNESS: 05:52
22 Q. But what I was saying was correct, that 05:50	22 A. Yes. 05:52
23 it's -- it's a matter of -- your -- your criticism in 05:50	23 BY MR. KOPEL: 05:52
24 this instances when we're talking about the 05:50	24 Q. Okay. So in that respect would you agree 05:52
25 harborages is that the test had the wrong objective. 05:50	25 that the i2L testing was emulative of real-world 05:52
Page 266	Page 268
1 It's not that it was an invalid 05:50	1 conditions in the event of an insect infestation? 05:52
2 test, it had the wrong objective as -- as it relates 05:50	2 MR. OSTOJIC: Same objection. 05:53
3 to this case in your opinion; correct? 05:51	3 Go ahead. 05:53
4 MR. OSTOJIC: Same objection. 05:51	4 BY THE WITNESS: 05:53
5 But go ahead. 05:51	5 A. To a -- to an extent. 05:53
6 BY THE WITNESS: 05:51	6 Because one harborage in a testing 05:53
7 A. In addition, the harborages protected the 05:51	7 chamber is not the same as a room that has different 05:53
8 insects from the ultrasound. 05:51	8 possible nesting sites where aggregation pheromones 05:53
9 As soon as they stick their little 05:51	9 could be deposited. 05:53
10 head outside of that harborage, it's likely that they 05:51	10 BY MR. KOPEL: 05:53
11 were going to be exposed to the ultrasonic. 05:51	11 Q. But people don't live in Plexiglass 05:53
12 So you -- so the fact that the 05:51	12 cubes; right? 05:53
13 insects did not move in Dr. Potter's test does not 05:51	13 A. No. 05:53
14 surprise me, it's what I wrote in my report, because 05:51	14 Q. Okay. Where people live there -- 05:53
15 they were protected. 05:51	15 A. Well -- 05:53
16 BY MR. KOPEL: 05:51	16 Q. Where people live if there is an insect 05:53
17 Q. Where do insects typically nest inside of 05:51	17 infestation, there is more likely to be deposits of 05:53
18 the house? 05:51	18 pheromones than there would be in a Plexiglass cube; 05:53
19 MR. OSTOJIC: Object to form, foundation. 05:51	19 correct? 05:53
20 BY THE WITNESS: 05:51	20 MR. OSTOJIC: Object to form. 05:53
21 A. Any place that suits their requirements. 05:51	21 BY THE WITNESS: 05:53
22 BY MR. KOPEL: 05:51	22 A. Yes, I think Dr. Potter stated that. 05:53
23 Q. And what's that? 05:51	23 That's one of the reasons he used a 05:53
24 A. Usually -- I mean I -- I would -- I would 05:51	24 harborage is because his objective was to test, in 05:53
25 list -- put a list together. It would be safety, 05:51	25 his words, under real-world conditions. 05:53
Page 267	Page 269

1 BY MR. KOPEL: 05:53	1 A. Ones that I know of, yes. 05:56
2 Q. So here, too, would you agree that your 05:53	2 Q. Okay. So in this regard, if we're 05:56
3 criticism with regards to the pheromones is not so 05:53	3 comparing the space used, between a larger space in a 05:56
4 much as that the test results are invalid as much as 05:53	4 house and a smaller space in a cube enclosure, 05:56
5 that you believe he had the wrong testing objective; 05:54	5 wouldn't you agree that the cube enclosure is more 05:56
6 is that correct? 05:54	6 advantageous to showing repellency effects than you 05:56
7 A. That's certainly correct, that he had -- 05:54	7 would have in a larger house? 05:56
8 in my opinion -- the wrong testing objective for what 05:54	8 A. I think it would be because you should be 05:56
9 is at issue here. 05:54	9 able to control for it, and you've got captive 05:56
10 But because sound -- ultrasound 05:54	10 insects that can't, you know, hide all around the 05:56
11 cannot penetrate these harborages, that's another 05:54	11 place. 05:56
12 flaw. 05:54	12 Q. So in this regard if -- if a repeller is 05:56
13 Q. Well, if your objective is to see if the 05:54	13 shown to be ineffective in the more advantageous 05:56
14 Bell + Howell repellers can drive pests out of a 05:54	14 environment, wouldn't it be reasonable to come to a 05:57
15 house, would this have been an appropriate way to 05:54	15 conclusion that it would also not be effective in a 05:57
16 structure the experiment? 05:54	16 less advantageous environment? 05:57
17 MR. OSTOJIC: Object to form, foundation. 05:54	17 MR. OSTOJIC: Object. Incomplete 05:57
18 But go ahead. 05:54	18 hypothetical. States facts that are not in evidence. 05:57
19 BY THE WITNESS: 05:54	19 But you can answer. 05:57
20 A. In Potter's opinion, yes; but, again, I 05:54	20 BY THE WITNESS: 05:57
21 say that's not the claim being made by the 05:54	21 A. I --
22 Bell + Howell repellers. 05:54	22 THE WITNESS: Would you repeat the question? 05:57
23 BY MR. KOPEL: 05:54	23 MR. KOPEL: Can you please read it back? 05:57
24 Q. Oh, sure. 05:54	24 (WHEREUPON, the record was 05:57
25 And -- but please listen carefully 05:54	25 read by the reporter.) 05:57
Page 270	Page 272
1 to my question. 05:54	1 MR. OSTOJIC: Same objections. 05:57
2 A. I did. 05:54	2 THE WITNESS: Wow, that's a long one. 05:57
3 Q. If you wanted to test whether or not the 05:54	3 Is it possible to break that up into 05:57
4 Bell + Howell ultrasonic pest repellers are capable 05:55	4 a couple questions? 05:57
5 of driving pest out of the house, in that instance do 05:55	5 MR. KOPEL: Sure. 05:57
6 you -- would you agree that the i2L tests were 05:55	6 BY MR. KOPEL: 05:57
7 conducted properly? 05:55	7 Q. So we've agreed that testing in a smaller 05:57
8 A. If my -- 05:55	8 space is more advantageous to showing a repellent 05:58
9 MR. OSTOJIC: Same objection. 05:55	9 effect; correct? 05:58
10 Go ahead. 05:55	10 A. Yes. 05:58
11 BY THE WITNESS: 05:55	11 Q. Okay. And a cube is a smaller space than 05:58
12 A. If my objective was to determine whether 05:55	12 a house; correct? 05:58
13 the Bell + Howell ultrasonic repellers could repel 05:55	13 A. Yes. 05:58
14 pests out of the house, I would have used real 05:55	14 Q. Okay. So if testing in a cube, which is 05:58
15 house -- houses and rooms. I would not have used and 05:55	15 a less advantageous -- excuse me. Let me start over. 05:58
16 relied, state my claim on lab scale experiments. 05:55	16 If testing in a cube, which is a 05:58
17 BY MR. KOPEL: 05:55	17 more advantageous space to showing a repellency 05:58
18 Q. Would you agree that use of these smaller 05:55	18 effect, shows that there is no repellency effect, 05:58
19 cubes is actually more advantageous to showing a 05:55	19 wouldn't it be reasonable to draw a conclusion, based 05:58
20 repellency effect given the smaller space than you 05:55	20 on that, that there would be no repellency effect in 05:58
21 would find in a house? 05:55	21 a house, which is a less advantageous environment? 05:58
22 A. If it doesn't have any sound shadow -- 05:55	22 MR. OSTOJIC: Object. Form, foundation, 05:58
23 something that creates a sound shadow. 05:56	23 incomplete hypothetical, and assumes facts not in 05:58
24 Q. Well, all houses have things that can 05:56	24 evidence. 05:58
25 create sound shadows; right? 05:56	25 But go ahead and answer. 05:58
Page 271	Page 273

1 BY THE WITNESS: 05:58	1 A. Not those that we -- I do not have any 06:01
2 A. It's not -- I -- the answer -- the short 05:58	2 recollection of that. 06:01
3 answer to your question is -- is yes. 05:58	3 The point I'm trying to make here is 06:01
4 But -- but, again, to go back to 05:58	4 that for testing insects that are -- that -- where 06:01
5 the -- the claims on the label of this repeller don't 05:58	5 your results are dependent upon locomotion in a lab 06:01
6 require that you have harborage or sofas or chairs 05:59	6 scale, controlled environment, what you want to do is 06:01
7 or walls. 05:59	7 encourage locomotion. 06:01
8 BY MR. KOPEL: 05:59	8 And when you feed them and you put 06:02
9 Q. So even if the repellents don't work in an 05:59	9 them in a harborage with aggravation pheromones and 06:02
10 environment where you have all the furniture you just 05:59	10 protect them from the repeller, you're not 06:02
11 mentioned, the claims would still be correct because 05:59	11 encouraging locomotion. 06:02
12 the packaging does not mention those items; is that 05:59	12 They're certainly expected to stay 06:02
13 what you're saying? 05:59	13 where they are. 06:02
14 A. That's -- 05:59	14 Q. If insects have infested somebody's 06:02
15 MR. OSTOJIC: Object to form, foundation, 05:59	15 kitchen, would you expect that those insects are 06:02
16 incomplete hypothetical, misstates the evidence. 05:59	16 starving? 06:02
17 But go ahead. 05:59	17 MR. OSTOJIC: Object to form, foundation. 06:02
18 BY THE WITNESS: 05:59	18 BY THE WITNESS: 06:02
19 A. That's what I'm saying. 05:59	19 A. It depends on the cleanliness, but I 06:02
20 BY MR. KOPEL: 05:59	20 wouldn't know. I mean if they are -- if there's 06:02
21 Q. Can we talk about the starvation concept 05:59	21 adequate food, crumbs and everything around, I would 06:02
22 that you're talking about on Page 8 here. 05:59	22 expect they're not starving. 06:02
23 Is it your contention that the 05:59	23 BY MR. KOPEL: 06:02
24 repellents would be less likely to have a repellent 06:00	24 Q. But would you -- do you believe -- most 06:02
25 effect if insects are satiated? 06:00	25 kitchens would have adequate crumbs or food that 06:02
Page 274	Page 276
1 A. It would be less likely to see the 06:00	1 insects could access; right? 06:02
2 repellent effect because they're not encouraged to 06:00	2 A. Yes, I'll agree to that. 06:02
3 seek out any food, they're satiated. 06:00	3 Q. Insects can get inside of people's 06:02
4 Q. And you cited some studies involving 06:00	4 garbages; right? 06:02
5 starvation here, and none of those studies were -- 06:00	5 A. Yes. 06:02
6 none of those studies involved ultrasound; correct? 06:00	6 Q. Okay. So it looks as -- it looks that in 06:02
7 A. No, they did not. 06:00	7 your -- like in your statistical analysis of the i2L 06:03
8 Q. And none of those studies had the 06:00	8 reports you added the missing pests in the conduit to 06:03
9 objective of testing the effectiveness of a specific 06:00	9 the pests counted in the non-released chamber; 06:03
10 repellent; did they? 06:00	10 correct? 06:03
11 A. No. 06:00	11 A. I did. 06:03
12 Q. Okay. Have you found any studies 06:00	12 Q. Have you made any calculations as to 06:03
13 involving ultrasound in which the insects were 06:00	13 whether or not your same criticism would apply had 06:03
14 starved? 06:00	14 you not done that? 06:03
15 A. I can't recall any, but that's not the 06:00	15 A. I have to refer to this Reference 10. 06:03
16 purpose of this criticism. 06:01	16 Can you point me to where in this 06:03
17 Q. Okay. Have you seen any published 06:01	17 report -- we're on -- 06:03
18 studies seeking to evaluate a repellent in which the 06:01	18 Q. Absolutely. I'm on Page 11. 06:03
19 insects were starved? 06:01	19 A. Okay. 06:03
20 A. Again, I cannot recall any. 06:01	20 Okay. And your question, again, now 06:04
21 Q. We've looked at several peer-reviewed 06:01	21 that I'm there. 06:04
22 studies today; correct? 06:01	22 Q. Okay. So you had specific statistics- 06:04
23 A. Yes. 06:01	23 based criticism of the i2L data; correct? 06:04
24 Q. Okay. Do you have any recollection of 06:01	24 A. Yes. 06:04
25 any of them saying that the insects were starved? 06:01	25 Q. Okay. Have you done any calculations to 06:04
Page 275	Page 277

<p>1 see if that criticism would still apply had you not 06:04</p> <p>2 added the missing pests in the conduit to the pests 06:04</p> <p>3 counted in the non-released chamber? 06:04</p> <p>4 A. I believe in working this up that I 06:04</p> <p>5 considered that, but because the actual numbers in 06:04</p> <p>6 the -- in the tubes were not specified, I did not run 06:05</p> <p>7 the statistics on that. 06:05</p> <p>8 Q. Can you please turn to your initial 06:05</p> <p>9 report in this case. It's Exhibit 1 from earlier 06:05</p> <p>10 today. 06:05</p> <p>11 A. What page? 06:05</p> <p>12 Q. Okay. Great. Please turn to Page 5. 06:05</p> <p>13 Okay. So I'm looking at Opinion 1 06:05</p> <p>14 here, and the last sentence states: "In my opinion 06:05</p> <p>15 if a customer does not follow the use instructions 06:05</p> <p>16 provided in succinct native language using common 06:05</p> <p>17 vernacular that is not overly burdensome to read and 06:05</p> <p>18 comprehend, then the customer has defaulted on</p> <p>19 his/her obligation to use the product in good faith 06:05</p> <p>20 and as intended by the entities; and, therefore, must 06:05</p> <p>21 take full responsibility for the end result to be at 06:05</p> <p>22 the desired result that the entities and the 06:05</p> <p>23 customers intended or not." 06:06</p> <p>24 Do you see that? 06:06</p> <p>25 A. I do. 06:06</p> <p style="text-align: right;">Page 278</p>	<p>1 manufacturer is held to the responsibility -- has the 06:07</p> <p>2 responsibility to have the product perform according 06:07</p> <p>3 to the claims made on the label. 06:07</p> <p>4 So we were very specific. And we 06:07</p> <p>5 were very specific because we weren't -- we 06:07</p> <p>6 weren't -- we didn't want class action suits to be 06:07</p> <p>7 filed against us. In Dow. 06:08</p> <p>8 Q. When you gave an opinion about what you 06:08</p> <p>9 think the interpretation of drives pests out means, 06:08</p> <p>10 was that based on your own personal interpretation, 06:08</p> <p>11 or was that based on how you believe consumers would 06:08</p> <p>12 interpret the phrase? 06:08</p> <p>13 A. It was based on what the words say. 06:08</p> <p>14 Q. So -- so is that the former? It's based 06:08</p> <p>15 on your own interpretation, or is it based on how you 06:08</p> <p>16 believe consumers would interpret the phrase? 06:08</p> <p>17 MR. OSTOJIC: Object to the form. 06:08</p> <p>18 Go ahead. 06:08</p> <p>19 BY THE WITNESS: 06:08</p> <p>20 A. It's not an interpretation. It's what 06:08</p> <p>21 the words say. 06:08</p> <p>22 BY MR. KOPEL: 06:08</p> <p>23 Q. Okay. 06:08</p> <p>24 A. Very clearly. It says, "drive pests 06:08</p> <p>25 out." 06:08</p> <p style="text-align: right;">Page 280</p>
<p>1 Q. Okay. Do you agree that this is -- these 06:06</p> <p>2 are things which are governed by applicable legal 06:06</p> <p>3 statutes or case law? 06:06</p> <p>4 MR. OSTOJIC: Object to form, foundation. 06:06</p> <p>5 BY THE WITNESS: 06:06</p> <p>6 A. I don't know case law. I -- I can't cite 06:06</p> <p>7 government regulations. 06:06</p> <p>8 What I can cite is the fact that if 06:06</p> <p>9 someone buys a device, a TV, a -- whatever, it's 06:06</p> <p>10 incumbent upon that customer to read how to use it 06:06</p> <p>11 according to the manufacturer. 06:06</p> <p>12 Or else if it's not used in 06:06</p> <p>13 accordance with the manufacturer, then who knows what 06:06</p> <p>14 the results going to be, and that customer has to 06:06</p> <p>15 accept the responsibility. 06:06</p> <p>16 That's what I say here. 06:06</p> <p>17 Q. Do you base this -- this opinion on, you 06:06</p> <p>18 know, science or other specialized or technology 06:07</p> <p>19 knowledge, or do you believe that this is common 06:07</p> <p>20 sense? 06:07</p> <p>21 A. Both. And I'll -- I'll give you the -- 06:07</p> <p>22 the -- the example of my Dow employment. 06:07</p> <p>23 One of the reasons that I was very, 06:07</p> <p>24 very careful on the language, the labeling language 06:07</p> <p>25 was because -- just like in this case -- the 06:07</p> <p style="text-align: right;">Page 279</p>	<p>1 Q. Have you spoken to any consumers? 06:08</p> <p>2 A. I speak to consumers every day. I'm a 06:08</p> <p>3 consumer. 06:08</p> <p>4 Q. I take that back. 06:08</p> <p>5 Have you spoken to any consumers 06:08</p> <p>6 about Bell + Howell ultrasonic pest repellers? 06:08</p> <p>7 A. No. 06:08</p> <p>8 Q. Do any -- do you have any data on -- on 06:08</p> <p>9 how they interpret this phrase? 06:09</p> <p>10 A. Only the depositions of Hart and Bueno. 06:09</p> <p>11 Q. Do -- have you performed any sort of 06:09</p> <p>12 conjoint analysis on this phrase? 06:09</p> <p>13 MR. OSTOJIC: Sorry. What? 06:09</p> <p>14 BY MR. KOPEL:</p> <p>15 Q. Have you performed any sort of conjoint 06:09</p> <p>16 analysis regarding this phrase? 06:09</p> <p>17 A. I don't understand conjoint. 06:09</p> <p>18 Q. Okay. Have you done any sort of study or 06:09</p> <p>19 other examination of consumer insight in consumer 06:09</p> <p>20 preference regarding this phrase? 06:09</p> <p>21 A. Regarding the phrase drive pests out? 06:09</p> <p>22 Q. Correct. 06:09</p> <p>23 A. Indirectly through that Amazon exercise I 06:09</p> <p>24 went through that's in the report. 06:09</p> <p>25 Q. So the Amazon exercise tells you how the 06:09</p> <p style="text-align: right;">Page 281</p>

1 consumers interpret that phrase? 06:09	1 reviews turned out that consumers were dissatisfied 06:12
2 A. No, it doesn't. 06:09	2 with the product. 06:12
3 It tells you whether these certain 06:09	3 Would that have made you question 06:12
4 percentage of verified users were satisfied with the 06:09	4 your opinions in this case? 06:12
5 product. 06:10	5 A. I would have put that in the totality of 06:12
6 Q. How often did you take Amazon reviews 06:10	6 everything else, yeah, it would have been 06:12
7 into account in your time at Dow? 06:10	7 supplemental, additional data. 06:12
8 A. It would be an additional data point 06:10	8 Q. Now, you've expressed some opinions here 06:13
9 if -- if it was ever thought of being used. 06:10	9 in which you stated that you thought the testimony by 06:13
10 Q. Can you identify -- can you remember a 06:10	10 the plaintiffs were indicative of satisfied 06:13
11 single instance in which it was used? 06:10	11 customers. 06:13
12 A. Well, we didn't have to use Amazon 06:10	12 Do you recall that? 06:13
13 because we had real-world customers that we would 06:10	13 A. Yes, that's back in the original report, 06:13
14 bring in for focus groups and feedback workshops and 06:10	14 expert -- I don't know what number. No. 1 I guess. 06:13
15 didn't need to go to Amazon in Dow. 06:10	15 Q. Is that opinion based on scientific, 06:13
16 Q. Have you ever seen any sort of 06:10	16 technical, or other specialized knowledge, or do you 06:13
17 publication or peer-reviewed journal article which 06:10	17 think that's common sense based on reading the 06:13
18 takes Amazon reviews into account when evaluating the 06:10	18 transcript? 06:13
19 efficacy of a product? 06:10	19 A. It's -- it's my common sense. 06:13
20 A. No. 06:10	20 If you're going to go on, could you 06:13
21 Q. Do you think that taking Amazon reviews 06:10	21 tell me what page you're on so I can get to it. 06:13
22 into account when evaluating the efficacy of a 06:10	22 MR. KOPEL: All right. Let's take a break. 06:14
23 product is a generally accepted practice in the field 06:10	23 THE VIDEOGRAPHER: The time is 6:16. 06:14
24 of entomology? 06:11	24 We're off the record. 06:14
25 A. I don't know that I've ever seen that. 06:11	25
Page 282	Page 284
1 But, like I said in my report, it's 06:11	1 (WHEREUPON, a recess was
2 not what I -- what I solely base my opinions on. 06:11	2 had.) 06:20
3 It's an extra data point. And I gather as much data 06:11	3 THE VIDEOGRAPHER: The time is 6:22. 06:20
4 as I can. 06:11	4 We're back on the record. 06:20
5 And this was specific to the claim 06:11	5 BY MR. KOPEL: 06:20
6 about worth of the -- it was claimed that these were 06:11	6 Q. Dr. Borth, earlier today we discussed 06:20
7 worthless products, and I think, you know, a very 06:11	7 your statement that you reject the allegation that 06:20
8 quick way to take a look at -- maybe a first order of 06:11	8 these devices do not repel pests, and one of the 06:20
9 proclamation, easily accessible to me, was the Amazon 06:11	9 references you cited was a study by Ballard and Gold. 06:20
10 reviews. 06:11	10 Do you recall that? 06:20
11 Q. All right. And how -- and there are 06:11	11 A. Yes. 06:20
12 multiple different varieties of Bell + Howell pest 06:11	12 Q. Okay. What did -- what examinations of 06:20
13 repellents available for sale on Amazon; correct? 06:11	13 the devices used in Ballard did you do in order to 06:20
14 A. Yes. 06:11	14 make a determination that the results of that study 06:21
15 Q. Okay. How many of them did you take into 06:11	15 were relevant to the Bell + Howell ultrasonic 06:21
16 account when you were doing their analysis? 06:11	16 devices? 06:21
17 A. Every one that came up in a review, as 06:11	17 A. If it's the same Ballard document, it's 06:21
18 long as it was from a verified purchaser. 06:11	18 the statement they made that cockroach activity was 06:21
19 And I do remember there is a number 06:12	19 increased to a significant degree in at least one of 06:21
20 in the report somewhere that -- if we turn to that 06:12	20 the reps, replications, in the chambers or cubes that 06:21
21 section. I think I did -- yes, it's Page 18 of my 06:12	21 they had the repeller active in. 06:21
22 report, number of ultrasonic pest repeller indoor 06:12	22 Q. Now -- 06:21
23 models with customer reviews, 11, so there were 11 06:12	23 A. That's my recollection. 06:21
24 different ones. 06:12	24 Q. Did you do any analysis of whether the 06:21
25 Q. Let's say your analysis of the Amazon 06:12	25 devices in Ballard had multiple speakers? 06:21
Page 283	Page 285

1 A. No. 06:21	1 Q. Is what you're saying that it is 06:24
2 Q. Did you do any analysis of the speaker 06:21	2 acceptable to use studies of devices other than the 06:24
3 size in the Ballard study? 06:21	3 Bell + Howell repellers to make a finding of 06:24
4 A. No. 06:21	4 efficacy. However, it is not acceptable to do so in 06:24
5 Q. How about speaker direction? Did you do 06:22	5 making a finding of non-efficacy? 06:24
6 any analysis of that? 06:22	6 A. I don't think I'm saying that. 06:24
7 A. No, I relied on their own words. 06:22	7 MR. OSTOJIC: Objection. Mischaracterizes 06:24
8 I mean I should read the report. 06:22	8 his testimony. Also asked and answered I think like 06:24
9 It's in one of these exhibits, but I didn't have 06:22	9 seven hours ago. 06:24
10 access to their repellers. They did not report on 06:22	10 But go ahead. 06:24
11 speaker size or shape or anything else. 06:22	11 BY THE WITNESS: 06:24
12 Q. Okay. But despite not knowing speaker 06:22	12 A. What I'm saying is that it -- the Gold 06:24
13 size or shape or number, you still made a 06:22	13 standard in this question is actually using 06:24
14 determination that the results of the study were 06:22	14 Bell + Howell devices. 06:24
15 relevant to determining the efficacy of the 06:22	15 It's not to use surrogates that were 06:24
16 Bell + Howell devices; correct? 06:22	16 in commercialization 20, 30 years ago because they 06:25
17 MR. OSTOJIC: Object to form. 06:22	17 weren't the devices that are in question. Things are 06:25
18 Go ahead. 06:22	18 improved, things change. 06:25
19 BY THE WITNESS: 06:22	19 I have admitted that the frequency 06:25
20 A. I used their experience, their research 06:22	20 and the decibels are important; but, again, even so, 06:25
21 to try to make the point that in their case -- in 06:22	21 you're not -- there's so many things that -- that 06:25
22 their research one of their cockroach replications 06:23	22 could affect the results that you obviously want to 06:25
23 created increase -- significantly increased the 06:23	23 use -- if you're going to make a claim like this, 06:25
24 activity of cockroaches in that test; and, thereby, 06:23	24 you're going to want to use the devices that are at 06:25
25 that ultrasonic waves are capable of affecting the 06:23	25 issue. 06:25
Page 286	Page 288
1 behavior of a cockroach. 06:23	1 BY MR. KOPEL: 06:25
2 Q. Even though they didn't test the 06:23	2 Q. All right. And -- but you didn't analyze 06:25
3 Bell + Howell device in the Ballard study; correct? 06:23	3 any of those things with regards to the Ballard 06:25
4 A. They did not. 06:23	4 study; right? 06:25
5 Q. Okay. Is that any different than 06:23	5 MR. OSTOJIC: Objection. Asked and answered. 06:25
6 Dr. Potter's reliance on studies where the 06:23	6 BY THE WITNESS: 06:25
7 Bell + Howell device wasn't tested? 06:23	7 A. Those things being the physicality of -- 06:25
8 A. Well, Dr. Potter is making the 06:23	8 the physics of the device? Is that what you mean by 06:25
9 allegation. 06:23	9 those things? 06:26
10 And if I was making an allegation, I 06:23	10 BY MR. KOPEL: 06:26
11 would want to use the exact device that's under 06:23	11 Q. Anything other than the frequency and 06:26
12 question. 06:23	12 amplitude? 06:26
13 Q. So you think using studies regarding 06:23	13 A. No, I did not. 06:26
14 other devices is acceptable in order to make a 06:23	14 MR. KOPEL: Okay. Dr. Borth, thanks for your 06:26
15 determination of efficacy but not in order to make a 06:24	15 time. I have no further questions but reserve the 06:26
16 determination of non-efficacy? 06:24	16 right to ask you more questions should new issues 06:26
17 MR. OSTOJIC: Objection. Mischaracterizes 06:24	17 come up on redirect. 06:26
18 his testimony. 06:24	18 MR. OSTOJIC: Sure. 06:26
19 BY THE WITNESS: 06:24	19 Dr. Borth, I have a few questions 06:26
20 A. Yeah, and I have to have you repeat it 06:24	20 for you. 06:26
21 because I -- it was long for me. 06:24	21 First of all, I want to mark as 06:26
22 BY MR. KOPEL: 06:24	22 Exhibit 13 I believe is the next number. 06:26
23 Q. Okay. So, in other words -- I'm trying 06:24	23 (Whereupon, a certain 06:26
24 to understand what you're saying. 06:24	24 document was marked Borth
25 A. Uh-huh. 06:24	25 Exhibit 13 for
Page 287	Page 289

1 identification.)		1 A. Okay.	06:28
2 EXAMINATION	06:26	2 Q. Do you have that somewhere within the	06:28
3 BY MR. OSTOJIC:	06:26	3 materials in front of you and maybe part of your	06:28
4 Q. Dr. Borth, Exhibit 16 [sic] was	06:26	4 Exhibit No. 1, your first report?	06:28
5 Defendants' Disclosure of Retained Experts that	06:26	5 A. Here it is. I think they're actually --	06:28
6 accompanied your reports and the reports of	06:26	6 the -- you're talking about the photocopies of the	06:28
7 Dr. Philip Whitford, okay.	06:26	7 product packaging and the labeling?	06:29
8 Underneath your name under the	06:26	8 Q. And the user instructions, yes.	06:29
9 No. 1, it indicates that you charge \$300 U.S. per	06:26	9 A. Yeah, that's all contained.	06:29
10 hour.	06:26	10 MR. KOPEL: I don't think so. We haven't	06:29
11 Do you see that?	06:26	11 used that today.	06:29
12 A. I do.	06:26	12 THE WITNESS: I think they're in -- weren't	06:29
13 Q. Is that the amount that you are charging	06:26	13 they in Potter's report, though?	06:29
14 per hour for your work in this case?	06:26	14 MR. KOPEL: I don't believe so.	06:29
15 A. Yes. Up -- for any -- any reports, for	06:26	15 THE WITNESS: No?	06:29
16 depositions. It changes if -- if court appearance is	06:27	16 MR. OSTOJIC: Sir, let me show you what we'll	06:29
17 required.	06:27	17 mark as Deposition Exhibit 14. I'll make a copy of	06:29
18 Q. Court appearance. By that you mean if	06:27	18 it if you want to take a look at it.	06:29
19 there's a trial?	06:27	19 MR. KOPEL: But didn't we mark at the	06:29
20 A. Yes.	06:27	20 Whitford deposition something very similar?	06:29
21 Q. And what do you charge in the event that	06:27	21 MR. OSTOJIC: Do you have the Whitford?	06:30
22 there's a charge?	06:27	22 Let me see. If we did, I'll use	06:30
23 A. \$450 per hour.	06:27	23 that.	06:30
24 Q. Okay. And is that the extent of the	06:27	24 MR. KOPEL: This?	06:30
25 compensation you have charged in this case or will	06:27	25 MR. OSTOJIC: Is there another one, the user	06:30
	Page 290		Page 292
1 charge?	06:27	1 instructions?	06:30
2 A. Yes.	06:27	2 MR. KOPEL: I believe --	06:30
3 Q. Sir, it's your opinion that the	06:27	3 MR. OSTOJIC: Then -- let me just mark this	06:30
4 Bell + Howell devices that are the subject matter of	06:27	4 as a new exhibit.	06:30
5 this lawsuit are effective in repelling the insects,	06:27	5 MR. KOPEL: Fine.	06:30
6 being spiders, roaches, and ants, in the area that is	06:27	6 MR. OSTOJIC: And I'll make a copy.	06:30
7 covered by the sound waves of those devices; correct?	06:27	7 MR. KOPEL: No problem.	06:30
8 A. Yes.	06:27	8 (Whereupon, a certain	06:30
9 Q. Based on your expertise, and, in	06:27	9 document was marked Borth	
10 particular, your expertise with respect to product	06:27	10 Exhibit 14 for	
11 development at Dow, is it reasonable for	06:27	11 identification.)	06:30
12 Bell + Howell to rely upon the tests of the	06:27	12 BY MR. OSTOJIC:	06:30
13 Bell + Howell devices that were conducted before 2017	06:28	13 Q. Sir, let he me show you what we've marked	06:30
14 to state that those devices were indeed ultrasonic	06:28	14 as Borth Exhibit No. 14.	06:31
15 repeller devices?	06:28	15 Do you recognize that?	06:31
16 A. Yes.	06:28	16 A. Yes.	06:31
17 Q. Is it, based on your expertise,	06:28	17 Q. And what is it?	06:31
18 reasonable for Bell + Howell to rely upon the tests	06:28	18 A. It's two pieces. The packaging of	06:31
19 conducted on the Bell + Howell repeller devices prior	06:28	19 Bell + Howell Ultrasonic Pest Repellers would be the	06:31
20 to 2017 to state that those devices do, in fact,	06:28	20 first -- the first piece.	06:31
21 repel the pests enumerated in the product literature?	06:28	21 The second piece is the Ultrasonic	06:31
22 A. Yes.	06:28	22 Pest Repeller Owner's Manual.	06:31
23 Q. Sir, I want to talk a little bit about	06:28	23 Q. Okay. Based on your expertise, and in	06:31
24 the product literature and the labeling with respect	06:28	24 particular the work you have done in your prior	06:31
25 to the Bell + Howell devices, okay?	06:28	25 employment in drafting, supervising, and approving	06:31
	Page 291		Page 293

1 product literature and labeling, is the product 06:31	1 we -- we scrutinized every word that was used, as I 06:34
2 literature that you find with respect to the 06:31	2 did in reviewing these, and they're very clear. 06:34
3 Bell + Howell ultrasonic pest repeller accurate based 06:31	3 And I don't know how a customer 06:34
4 on all the analysis you have done in this case? 06:31	4 could read into this anything more than what's 06:34
5 A. Yes, it is. 06:31	5 stated, that they're going to drive pests out and 06:34
6 Q. Is the labeling and product literature 06:31	6 help -- help repel unwanted pests. 06:34
7 shown in Exhibit No. 14 true based on all of your 06:31	7 Q. Dr. Borth, is it true that your opinions 06:34
8 analysis in this case? 06:31	8 with respect to the labeling of product literature of 06:34
9 A. Yes, it is. 06:31	9 the Bell + Howell devices is based upon your specific 06:34
10 Q. Sir, is it your opinion that the 06:31	10 expertise in drafting, supervising, and working on 06:34
11 Bell + Howell devices which are the subject matter of 06:32	11 drafting similar product literature warnings and user 06:34
12 this lawsuit do indeed drive pests out from the area 06:32	12 instructions for products? 06:34
13 covered by the sound waves of the devices? 06:32	13 A. That's what I'm relying on, and that's 06:34
14 A. Yes. 06:32	14 why I feel I'm in -- an expert or qualified to talk 06:34
15 Q. Does Bell + Howell at any -- within any 06:32	15 about this. 06:34
16 part of its product literature claim that their 06:32	16 Q. Sir, earlier, many, many hours ago you 06:34
17 devices can penetrate walls? 06:32	17 gave a statement I believe at one point where the 06:35
18 A. No. 06:32	18 question was asked maybe with a double negative about 06:35
19 Q. Do the -- does the product literature 06:32	19 the reasonableness of consumers in reading the 06:35
20 from Bell + Howell at all claim that its devices and 06:32	20 literature. 06:35
21 the sound waves emitted from those devices will drive 06:32	21 Do you recall that? 06:35
22 pests out from behind walls or under floors? 06:32	22 A. Vaguely. 06:35
23 A. No. 06:32	23 Q. Okay. Just so I'm clear, it's your 06:35
24 Q. Sir, based on your work in this case and 06:32	24 opinion, based upon your expertise, that the 06:35
25 your expertise, is it true that it is not reasonable 06:32	25 Bell + Howell product literature, the user 06:35
Page 294	Page 296
1 given the Bell + Howell product language that 06:32	1 instructions are clear; correct? 06:35
2 consumers would believe that the Bell + Howell 06:32	2 A. Yes. 06:35
3 devices would repel and drive pests out from behind 06:32	3 Q. And that consumers, based on your 06:35
4 walls or under floors? 06:33	4 expertise and what you've seen in the product 06:35
5 A. Just -- could you ask the first part of 06:33	5 literature, should have understood that these 06:35
6 that question again because it's a -- I think it's a 06:33	6 ultrasonic repellers would repel and drive pests out 06:35
7 double negative. 06:33	7 when the pests are exposed to the sound waves; 06:35
8 MR. OSTOJIC: It is a double negative. Let 06:33	8 correct? 06:35
9 me ask you this. 06:33	9 A. Yes. 06:35
10 BY MR. OSTOJIC: 06:33	10 Q. And that does not mean that it would 06:35
11 Q. Sir, is it your opinion that it would not 06:33	11 drive pests out that are protected from the sound 06:35
12 be reasonable, given Bell & Howell's product 06:33	12 waves, for instance, pests behind walls or under 06:35
13 literature, that consumers would believe in 06:33	13 floors; correct? 06:35
14 purchasing the devices that the devices would repel 06:33	14 MR. KOPEL: Objection. Leading. 06:36
15 and drive pests out from behind walls or under 06:33	15 BY THE WITNESS: 06:36
16 floors? 06:33	16 A. It does not mean that. 06:36
17 A. All right. I got it. 06:33	17 BY MR. OSTOJIC: 06:36
18 It would not be reasonable for 06:33	18 Q. Sir, earlier in the deposition you were 06:36
19 consumers to believe that based on the product 06:33	19 asked whether you had seen -- s-e-e-n -- any evidence 06:36
20 literature. 06:33	20 of the effectiveness of the Bell + Howell devices 06:36
21 Q. Why not? 06:33	21 when pests were inside of a bed. 06:36
22 A. Because it doesn't say they do. It makes 06:33	22 Do you recall that? 06:36
23 no claim for that. 06:33	23 A. Yes. 06:36
24 When I wrote labels, approved, 06:33	24 Q. And you haven't seen any actual testing 06:36
25 reviewed, and wrote labels for Dow, very specifically 06:33	25 done where a bed was placed in a room and the 06:36
Page 295	Page 297

1 Bell + Howell devices were then activated, for 06:36	1 Now, I know -- I know contract has 06:38
2 instance, insects in the bed; correct? 06:36	2 legal language or legal meaning, and I don't know 06:38
3 A. I have not. 06:36	3 that I'm going -- I'm not a legalese person, so 06:38
4 Q. But is it -- and I think you asked the 06:36	4 contract is: We give you the -- you buy the product; 06:38
5 same question as to whether you've seen evidence of 06:36	5 here's the instructions on how to use it; if you use 06:39
6 the Bell + Howell devices with furniture and with 06:36	6 it according to these instructions, we claim it will 06:39
7 carpeting. 06:36	7 work the way we claim it will. If you don't use it 06:39
8 Do you recall that? 06:36	8 that way, then who is breaking the contract. It's 06:39
9 A. Yes. 06:36	9 not us, we've given it to you. It would be the 06:39
10 Q. Is it fair to say, though, even though 06:36	10 consumer, the enduser. 06:39
11 you haven't seen those tests, it's still your opinion 06:36	11 MR. KOPEL: I'm going to -- I'm going to 06:39
12 that the Bell + Howell devices are effective in 06:36	12 object to the extent that this line of questioning is 06:39
13 repelling pests to the extent that the sound waves 06:36	13 asking an entomologist for his legal opinions. 06:39
14 can reach those pests; fair? 06:36	14 Go on. 06:39
15 A. Yes, fair and correct. 06:37	15 BY MR. OSTOJIC: 06:39
16 Q. Does it matter to you whether there -- 06:37	16 Q. Sir, you were asked several questions 06:39
17 whether or not you've seen tests involving furniture 06:37	17 about the testing done by SGS and Intertek and 06:39
18 and carpeting in the Bell + Howell devices? 06:37	18 whether that testing had been peer reviewed. 06:39
19 Does it matter with respect to your 06:37	19 Do you recall that? 06:39
20 opinion that the Bell + Howell devices are effective 06:37	20 A. Yes. 06:39
21 to repel pests? 06:37	21 MR. KOPEL: Objection. That misstates the 06:39
22 MR. KOPEL: Can you repeat the question, 06:37	22 testimony. 06:39
23 please? 06:37	23 BY MR. OSTOJIC: 06:39
24 MR. OSTOJIC: Sure. 06:37	24 Q. Did -- did Dow, in performing testing on 06:39
25	25 products, ever publish the results of the testing of 06:39
Page 298	Page 300
1 BY MR. OSTOJIC: 06:37	1 products? 06:40
2 Q. Let me ask you: Does it matter with 06:37	2 A. That depended on the phase of the 06:40
3 respect to your opinion that the Bell + Howell 06:37	3 development. 06:40
4 devices do repel pests that are exposed to the sound 06:37	4 Certainly we did not -- and reserve 06:40
5 waves from those devices, whether or not you've now 06:37	5 the right not to -- we didn't need to. 06:40
6 looked at tests where they included furniture or 06:37	6 I mean if it was felt that it would 06:40
7 carpeting or floors and walls? 06:37	7 help commercialize, we would, but for the most part 06:40
8 A. My opinions are the same as what I've 06:37	8 we did not. 06:40
9 stated in -- in my reports. 06:38	9 We considered it proprietary for our 06:40
10 Q. Okay. Sir, you indicated during your 06:38	10 own use. 06:40
11 deposition when you were questioned about what 06:38	11 Q. Do companies typically, when they're 06:40
12 Ms. Feuerstein said with respect to the product 06:38	12 developing and testing a new product, for instance, 06:40
13 literature, and I believe one of your responses was: 06:38	13 will they then publish in a publication the testing 06:40
14 Words in a product literature prevail. 06:38	14 of the product before putting the product out to 06:40
15 Do you recall that? 06:38	15 market? 06:40
16 A. Yes. 06:38	16 A. No. In fact, that's illegal. 06:40
17 Q. What did you mean by that? 06:38	17 Q. Okay. So is it fair to say that for most 06:40
18 MR. KOPEL: Objection. That calls for a 06:38	18 product and manufacturers who test products, they 06:40
19 legal conclusion. 06:38	19 don't publish the results of their test; is that 06:40
20 MR. OSTOJIC: I'm asking what he meant. 06:38	20 true? 06:40
21 BY THE WITNESS: 06:38	21 A. That's true. Until commercialization, 06:40
22 A. The way I think of product literature and 06:38	22 and then there's the opportunity if they want to. 06:41
23 the way I operated in Dow, to the satisfaction of 06:38	23 They're not obliged, obligated to. 06:41
24 Dow, was that the product literature, as written, was 06:38	24 Q. Now, does the fact that a testing of a 06:41
25 akin to a contract. 06:38	25 product is not published in a peer-reviewed article, 06:41
Page 299	Page 301

1	does that change the results of that testing or the	06:41	1	MR. OSTOJIC: Sir, I don't have any further	06:43
2	analysis?	06:41	2	questions.	06:43
3	A. No.	06:41	3	Thank you.	06:43
4	Q. Sir, is it improper to test a product	06:41	4	MR. KOPEL: I've got some.	06:43
5	contrary to its user instructions?	06:41	5	EXAMINATION	06:43
6	A. No.	06:41	6	BY MR. KOPEL:	06:43
7	Q. Listen to the question.	06:41	7	Q. The -- have you ever seen any test of any	06:43
8	Is it improper to test a product	06:41	8	ultrasonic pest repeller, including all tests you've	06:43
9	contrary to its user instructions in determining the	06:41	9	seen done on Bell + Howell repellers that did not	06:43
10	effectiveness of the product?	06:41	10	include food?	06:43
11	A. Is it improper?	06:41	11	A. I cannot recall any.	06:44
12	Yes.	06:41	12	Q. And the Chinese tests that were	06:44
13	Q. Okay. Why?	06:41	13	commissioned by Intellitec on the Bell + Howell	06:44
14	A. Because -- go back to those words.	06:41	14	repellers, those all included food; correct?	06:44
15	It is the manufacturer who tells the	06:41	15	A. They did.	06:44
16	customer how to use it.	06:41	16	Q. Is that contrary to the instructions?	06:44
17	If you're researching it or testing	06:41	17	A. Instructions of the pest repeller?	06:44
18	it in conflict with the user instructions, then	06:41	18	Q. Yes.	06:44
19	there's no basis for any claims.	06:41	19	A. The instructions say to increase the	06:44
20	Q. I -- I take it, sir, with most products	06:42	20	efficiency of the repeller -- maybe I should get it	06:44
21	there are pros and cons to products; correct?	06:42	21	back -- but to remove all food and so forth.	06:44
22	A. Always, yes.	06:42	22	Different -- different purpose.	06:44
23	Q. And I take it with each product there are	06:42	23	Q. I don't understand.	06:44
24	certain -- there are limitations to every product;	06:42	24	Is that -- is that a violation of	06:44
25	correct?	06:42	25	the instructions?	06:44
Page 302			Page 304		
1	A. Yes.	06:42	1	A. It's counter to what the instructions	06:44
2	Q. For instance, pesticides can be	06:42	2	say.	06:44
3	effective; true?	06:42	3	Q. Does that invalidate the results of those	06:44
4	A. They can be.	06:42	4	tests?	06:44
5	Q. If the pesticide is not used in	06:42	5	A. I don't think so.	06:44
6	accordance with its instructions, it -- its	06:42	6	Q. Okay. Does it -- does the fact that the	06:44
7	effectiveness will be decreased, if not nullified.	06:42	7	food was included in the tests commissioned by an i2L	06:45
8	Would you agree with that?	06:42	8	and ICR research lab, does that invalidate the	06:45
9	A. It could very well happen.	06:42	9	results of those tests?	06:45
10	Q. So if a pesticide is used to, for	06:42	10	A. Well, what it does is -- is causes you to	06:45
11	instance, eradicate pests from a home and you applied	06:42	11	ask a question, the questions that you're asking.	06:45
12	the pesticide inside the toilet, how effective would	06:42	12	It would be more straightforward if	06:45
13	it be?	06:42	13	they didn't, then we could compare apples to apples.	06:45
14	A. It would not be effective at all.	06:42	14	But because they did, then we have	06:45
15	Q. Would that be true then with the	06:42	15	to ask these questions.	06:45
16	Bell + Howell devices as with any device that's being	06:42	16	And similarly with the China tests,	06:45
17	used?	06:42	17	no one claimed in this room that they were perfect	06:45
18	A. Yes. Same -- same concept, same logic.	06:42	18	tests.	06:45
19	Q. Sir, when you gave your opinion that	06:42	19	You always learn things in testing;	06:45
20	the -- that the two named plaintiffs in this case who	06:42	20	and if you had the time and the resources, you would	06:45
21	were deposed, that the devices used in their home,	06:42	21	test more and improve, test more and improve, so I	06:45
22	based on their testimony, actually was effective, was	06:43	22	don't see that that invalidates their -- their test.	06:45
23	that based on your experience and knowledge as an	06:43	23	Maybe you weren't asking that.	06:45
24	expert in this field?	06:43	24	Q. No, that's a -- that -- and when you say	06:45
25	A. It sure was.	06:43	25	you don't see that invalidates their tests, that was	06:45
Page 303			Page 305		

1 referring to i2L and ICR; correct? 06:45	1 you off, but you might have misunderstood. 06:48
2 A. And China. 06:46	2 What if I told you that the Amazon 06:48
3 Q. Okay. Thank you. 06:46	3 rating that you've observed for this product in fact 06:48
4 Now when -- you talk about consumer 06:46	4 is below the average Amazon rating across all 06:48
5 understanding of these -- the claims on the label. 06:46	5 products on Amazon, would that change your opinion? 06:48
6 Can you identify what facts and data 06:46	6 MR. OSTOJIC: Object to form as to what 06:48
7 you have concerning consumer understanding of these 06:46	7 opinion, but go ahead and answer it. 06:48
8 claims? 06:46	8 BY THE WITNESS: 06:48
9 A. It's -- it's based on my experience. 06:46	9 A. I've never -- I've never said in the 06:48
10 I -- I have written labels and product literature for 06:46	10 reports or in this setting that Amazon -- the Amazon 06:48
11 enduser -- for customer use. 06:46	11 words that you see in that report are the sole basis 06:48
12 And the burden in that -- in that 06:46	12 for me rendering an opinion. It's supplemental data. 06:48
13 role is to -- and, as I said in here, make it 06:46	13 It's a piece of data. I look at all the data. It 06:48
14 succinct, make it understandable, use the native 06:46	14 certainly does not have the weight of the experiments 06:48
15 language for the customers. 06:46	15 that were -- that were done. 06:49
16 And I think that the Bell + Howell 06:46	16 BY MR. KOPEL: 06:49
17 product literature that I've seen fulfills those 06:46	17 Q. Do you -- have you seen any evidence that 06:49
18 requirements. 06:46	18 ultrasonic sound waves are capable of reaching pests 06:49
19 Q. I understand your experience, but I was 06:46	19 within a room that contains carpeting? 06:49
20 asking something entirely different. 06:46	20 MR. OSTOJIC: Objection. Asked and answered. 06:49
21 Have you seen any data regarding 06:46	21 BY THE WITNESS: 06:49
22 consumer understanding of these claims? 06:47	22 A. I don't think so. I don't know that it's 06:49
23 MR. OSTOJIC: Object to the form as to data 06:47	23 relevant to the case. Why is it relevant to the 06:49
24 and foundation. 06:47	24 case? We're talking about the claims made on this 06:49
25 But go ahead. 06:47	25 packaging. 06:49
Page 306	Page 308
1 BY THE WITNESS: 06:47	1 BY MR. KOPEL: 06:49
2 A. I -- I -- indirectly, yes. 06:47	2 Q. Have you seen any evidence that the 06:49
3 Indirectly with the Amazon review 06:47	3 ultrasonic waves emitted by the Bell + Howell 06:49
4 that I did before, that I talked about before. 06:47	4 repellers are capable of reaching pest in a room that 06:49
5 BY MR. KOPEL: 06:47	5 contains furniture? 06:49
6 Q. Okay. But did the Amazon reviews say 06:47	6 MR. OSTOJIC: Objection. Asked and answered 06:49
7 what the consumers thought the claims meant? 06:47	7 and may call -- and foundation. 06:49
8 A. No, they do not -- I don't know whether 06:47	8 Also incomplete hypothetical to type 06:49
9 they say it or not. They're taking their whole 06:47	9 of furniture, where it's located. 06:49
10 experience and lumping it into a one of five star 06:47	10 Go ahead. 06:49
11 rating. 06:47	11 MR. KOPEL: That's called witness coaching. 06:49
12 And their experiences have to 06:47	12 Please stop that. 06:50
13 include that they got a package that had these kind 06:47	13 BY THE WITNESS: 06:50
14 of words on it, and they got a user manual that said 06:47	14 A. I've not seen Bell + Howell -- 06:50
15 this. 06:47	15 Bell + Howell devices tested in rooms that have 06:50
16 Q. Did you ask -- ever ask a single consumer 06:47	16 furniture or carpeting. Though it still doesn't 06:50
17 how they understood these claims? 06:47	17 change my opinion. 06:50
18 A. No. 06:47	18 BY MR. KOPEL: 06:50
19 Q. What if I told you that the Amazon rating 06:47	19 Q. Do you believe that if submitted for 06:50
20 for this product is below average, would that change 06:48	20 publication in a peer-reviewed journal, the Chinese 06:50
21 your opinion? 06:48	21 studies conducted on the Bell + Howell repellers 06:50
22 A. You already asked that question, and I 06:48	22 would be potentially selected for publication? 06:50
23 said I would -- I would certainly -- 06:48	23 MR. OSTOJIC: Objection. Asked and answered 06:50
24 Q. I think I -- I think I -- you might have 06:48	24 like two to three hours ago. 06:50
25 misunderstood what I was saying. I'm sorry to cut 06:48	25 Common, we got to move on to other 06:50
Page 307	Page 309

1 things. We're just repeating the same questions. 06:50
 2 But go ahead and answer it again. 06:50
 3 BY THE WITNESS: 06:50
 4 A. No, that wasn't the purpose of their 06:50
 5 studies. Feuerstein said that. It did not want to 06:50
 6 publish. 06:50
 7 MR. KOPEL: All right, I have no further 06:50
 8 questions. 06:50
 9 MR. OSTOJIC: We're going to reserve 06:50
 10 signature. 06:50
 11 THE VIDEOGRAPHER: The time it now 6:53 p.m. 06:51
 12 This is the end of Media No. 5. This concludes this 06:51
 13 deposition.
 14 We're off the record. 06:51
 15 MS. REPORTER: Are you ordering the 06:51
 16 transcript at this time? 06:51
 17 MR. KOPEL: Not at this time. 06:51
 18 Do you know pricing? Can I look at 06:51
 19 pricing? I'm going to have my office contact 06:51
 20 Veritext in regards to ordering. 06:51
 21 MS. REPORTER: Would you like a copy if it's
 22 ordered? 06:51
 23 MR. OSTOJIC: I will not need one now; but 06:51
 24 obviously if the plaintiff orders one, please contact 06:51
 me, I will probably get a copy. 06:51
 25 (Whereupon, at 6:53 p.m. the deposition was concluded.)

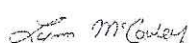
Page 310

1 UNITED STATES DISTRICT COURT
 2 SOUTHERN DISTRICT OF NEW YORK
 3
 4 I hereby certify that I have read the
 5 foregoing transcript of my deposition given at the
 6 time and place aforesaid, consisting of Pages 1 to
 7 311, inclusive, and I do again subscribe and make
 8 oath that the same is a true, correct and complete
 9 transcript of my deposition so given as aforesaid,
 10 and includes changes, if any, so made by me.
 11
 12
 13 DR. PAUL W. BORTH
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Page 311

1 CERTIFICATE
 2 OF
 3 CERTIFIED SHORTHAND REPORTER
 4
 5 I, Lynn A. McCauley, a Certified
 6 Shorthand Reporter of the State of Illinois, CSR,
 7 RPR, License No. 84-003268, do hereby certify:
 8 That previous to the commencement of the
 9 examination of the aforesaid witness, the witness was
 10 duly sworn by me to testify the whole truth
 11 concerning the matters herein;
 12 That the foregoing deposition transcript
 13 was reported stenographically by me, was thereafter
 14 reduced to typewriting under my personal direction
 15 and constitutes a true and accurate record of the
 16 testimony given and the proceedings had at the
 17 aforesaid deposition;
 18 That the said deposition was taken before
 19 me at the time and place specified;
 20 That I am not a relative or employee or
 21 attorney or counsel for any of the parties herein,
 22 nor a relative or employee of such attorney or
 23 counsel for any of the parties hereto, nor am I
 24 interested directly or indirectly in the outcome of
 25 this action.

Page 312

1 IN WITNESS WHEREOF, I do hereunto set my
 2 hand at Chicago, Illinois, this 19th day of January
 3 2018.
 4
 5 
 6 LYNN A. MC CAULEY, CSR, RPR
 7 License No. 84-003268
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Page 313

79 (Pages 310 - 313)